

IN THE CLAIMSAmendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-27. (Cancelled).
28. (Original) A method for making polymer-coated aggregates of single-wall carbon nanotubes comprising dispersing aggregates of single-wall carbon nanotubes and a polymer in a solvent by a method selected from the group consisting of mixing, sonication, heating and combinations thereof.
29. (Currently Amended) A method in accordance with claim 28, wherein the aggregates of single-wall carbon nanotubes ~~comprises~~ comprise ropes of single-wall carbon nanotubes which are substantially aligned along their longitudinal axes.
30. (Currently Amended) A method in accordance with claim 28, wherein the aggregates of single-wall carbon nanotubes ~~comprises~~ comprise bundles of single-wall carbon nanotubes which are substantially aligned along their longitudinal axes.
31. (Original) A method in accordance with claim 28, wherein the aggregates of single-wall carbon nanotubes are coated with at least two different polymers.
32. (Original) A method in accordance with claim 28, wherein the single-wall carbon nanotubes in the aggregates are substantially free of amorphous carbon.
33. (Original) A method accordance with claim 28, wherein the polymer and the aggregates of single-wall carbon nanotubes are added to the solvent sequentially.
34. (Original) A method in accordance with claim 28, wherein the polymer and the aggregates of single-wall carbon nanotubes are added to the solvent simultaneously.
35. (Original) A method in accordance with claim 28, wherein the solvent comprises water and the polymer is water-soluble.

36. (Original) A method in accordance with claim 28, wherein the solvent further comprises a surfactant.

37. (Original) A method in accordance with claim 28, wherein the concentration of the aggregates of single-wall carbon nanotubes in the solvent is between about 0.1 gram/liter and about 5 gram/liter.

38. (Original) A method in accordance with claim 28, wherein the concentration of the polymer in the solvent is between about 1.0 percent and about 5.0 percent by weight.

39. (Original) A method in accordance with claim 28, wherein the solvent is heated to a temperature at least about 40 °C.

40. (Original) A method in accordance with claim 28, wherein the solvent is heated to a temperature of between about 50 °C and about 60 °C.

41. (Original) A method in accordance with claim 28, wherein the solvent is heated between about 0.1 hours and about 100 hours.

42. (Original) A method in accordance with claim 28, wherein the solvent is heated between about 1 hour and about 50 hours.

43. (Original) A method in accordance with claim 28, further comprising the step of extruding the polymer-wrapped aggregates of single-wall carbon nanotubes with a second polymer to form a composite of single-wall carbon nanotube aggregates.

44. (Currently Amended) A method for making polymer-coated aggregates of single-wall carbon nanotubes comprising:

(a) dispersing aggregates of single-wall carbon nanotubes and a polymer in a solvent by a method selected from the group consisting of mixing, sonication, heating and combinations thereof; and

(b) ~~in accordance with claim 28, further comprising the step of removing the polymer coat from the polymer-coated aggregates of the single-wall carbon nanotubes by contacting the~~

polymer-coated aggregates of single-wall carbon nanotubes with a second solvent having a low surface tension.

45. (Previously Presented) A method in accordance with claim 44, wherein the second solvent comprises a chlorinated hydrocarbon.

46. (Original) A method in accordance with claim 28, further comprising the step of aligning the polymer-wrapped aggregates of single-wall carbon nanotubes by application of an external field selected from the group consisting of an electrical field, magnetic field, and shear flow field.

47. (Previously Presented) A method in accordance with claim 28, wherein the polymer is selected from the group consisting of polyvinyl pyrrolidone (PVP), polystyrene sulfonate (PSS), poly(1-vinyl pyrrolidone-co-vinyl acetate) (PVP/VA), poly(1-vinyl pyrrolidone-co-acrylic acid), poly(1-vinyl pyrrolidone-co-dimethylaminoethyl methacrylate), polyvinyl sulfate, poly(sodium styrene sulfonic acid-co-maleic acid), dextran, dextran sulfate, bovine serum albumin (BSA), poly(methyl methacrylate-co-ethyl acrylate), polyvinyl alcohol, polyethylene glycol, and polyallyl amine.

48. (Currently Amended) The method in accordance with claim 28, wherein the aggregates of single-wall carbon nanotubes are dispersed with at least two different polymers.

49. (Previously Presented) The method in accordance with claim 36, wherein the surfactant is sodium dodecyl sulfate (SDS).

50. (Previously Presented) A method in accordance with claim 44, wherein the second solvent comprises tetrahydrofuran.